

NOTES

ACACIA TORTUOSA (LEGUMINOSAE) NEW TO FLORIDA.—During recent work on the Leguminosae of Florida several supposedly well-understood genera have been found to be represented in the state by species not previously reported for the Southeast. *Acacia* has contributed two: *A. macracantha*, a West Indian and Central American tree recently found well established and perhaps native in the Florida Keys (Brittonia 19:283-284. 1967), and now a second, *A. tortuosa*.

Acacia tortuosa (L.) Willd. is a small tree of the West Indies, Mexico, and southern Texas. It is related rather closely to the even more widespread and generally much more common Sweet Acacia, *A. farnesiana*, but is readily distinguished by the longer, more slender fruits constricted between the seeds, suggestive of those of *Capparis flexuosa*.

Two stations have now been located for this species in Florida, both along the coast of Collier County in the southwestern part of the state. Representative collections are as follows: Dry shell island, Chokoloskee. Eleanor Scull, 5 June 1937 (FLAS); Slope of shell mound, Chokoloskee Island. D. B. Ward 6021 (DUKE, FLAS, FSU, GA, GH, NCU, NY, US, USF); Ferguson River shell mounds. F. C. Craighead, 28 June 1960 (FLAS). At both of these stations the plants are well established, although at Chokoloskee the population size is only a fraction of that of the ubiquitous *A. farnesiana*. At this station the *A. tortuosa* forms small (to 4 meters), much-branched, flat-topped trees, with the branches seemingly coarser than those of adjacent *A. farnesiana* of the same height, thereby permitting the plants to be distinguished at a distance with little error.

It is notable that all Florida collections have come from shell mounds, a substrate deposited by man, thus the habitat is in no sense to be considered "undisturbed." Whether this species was of value to the aboriginal Caloosas, perhaps for their marginally edible fruits, and thus a pre-Columbian introduction from the West Indies, or whether the plants became established in relatively recent times by natural means, remains an open question.

A total of five species of *Acacia* is now known to grow in Florida under natural conditions, and the following key, based on Florida materials, is suggested for their separation.

1a. Herbaceous or suffrutescent; flowers white (rarerly pinkish); leaves lacking glands on both petiole and rachis; pods flat.

A. angustissima (Mill.) Kuntze var. *hirta*
(Nutt.) Robins. (= *Acaciella hirta*
(Nutt.) Britt. & Rose)

1b. Woody, shrubs (often low in *A. pinetorum*) or small trees; flowers

yellow or orange; leaves with a gland or glands on upper surface of petiole or both petiole and rachis; pods terete or compressed, but never flat.

- 2a. Pods clearly compressed laterally; leaves with 14-20 pairs of pinnae; prominent craterform gland present between terminal pair or pairs of pinnae.

A. macracantha Humb. & Bonpl. ex Willd.
(= *Acacia macracanthoides* Bert. in DC.; *Acacia lutea* (Houst. ex Mill.) Hitchc., not *A. lutea* Leavenw.)

- 2b. Pods terete or nearly so; leaves with 4-8 pairs of pinnae; inconspicuous disciform gland present between terminal pair of pinnae, or absent (although present on petiole).

- 3a. Pods somewhat constricted between the seeds, glabrate or with a dense, granular pubescence, 8-10 cm. long.

A. tortuosa (L.) Willd.

- 3b. Pods uniform in thickness, glabrous, 4-8 cm. long.

- 4a. Leaflets 1.5-3 mm. long, without (or with very obscure) lateral veins; pod with suture not apparent, blunt or long tapering; spines slender, 8-12 mm. long.

A. pinetorum Hermann (= *Vachellia peninsularis* Small, not *Acacia peninsularis* (Britt. & Rose) Standley; *Vachellia insularis* Small, not *Acacia insularis* A. Rich.)

- 4b. Leaflets 3-6 mm. long, with 1-6 prominent lateral veins; pod with two low ridges paralleling suture, usually blunt; spines moderately stout, usually either ca. 5 mm. long or ca. 25 mm. long.

A. farnesiana (L.) Willd. (= *Vachellia farnesiana* (L.) Wight & Arn.; ?*Vachellia densiflora* Alexander in Small, not *Acacia densiflora* Morrison)

I am grateful to Dr. Velva Rudd, Washington, D.C., for her observations on my earlier manuscripts of this group, from which the above key is derived.—Daniel B. Ward, University of Florida, Gainesville, Florida 32601.

ANODA CRISTATA (MALVACEAE) IN FLORIDA.—In the fall of 1965, Dr. Walter Scudder, of the Central Florida Experiment Station, Sanford, brought an interesting group of vegetable farm weeds to Gainesville for identification. One of these (collected 16 Sept. 1965 at Zellwood, Orange County; specimens deposited in the Herbarium of the Agricultural Experiment Station, University of Florida, was an unusual